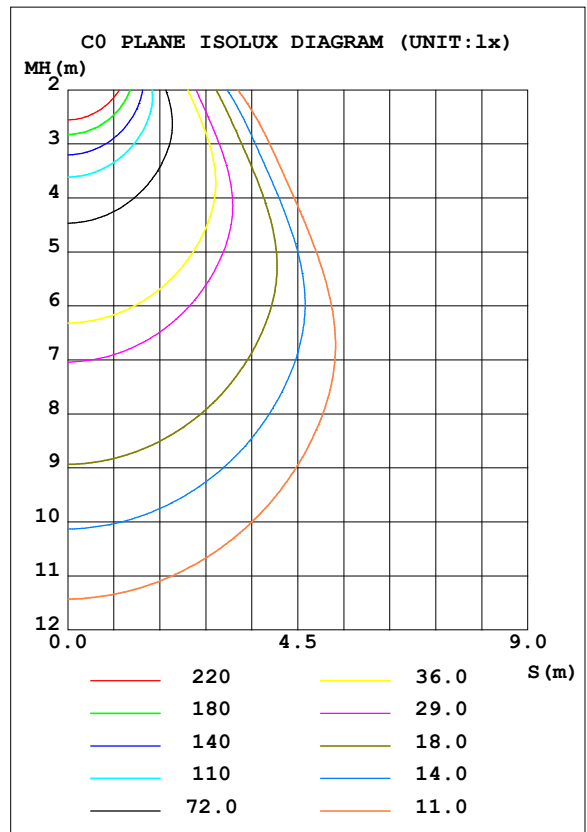
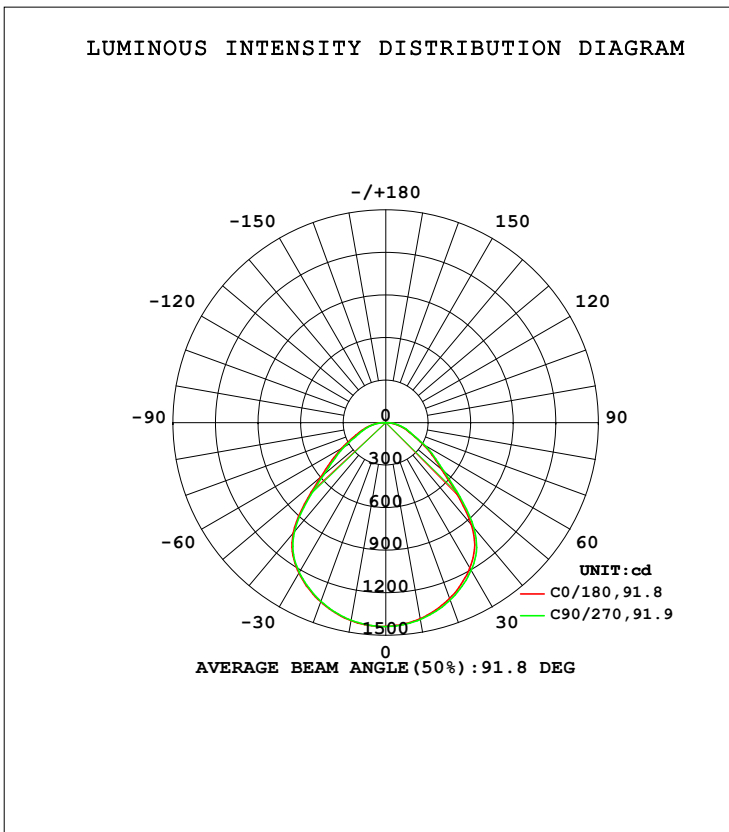


LUMINAIRE PHOTOMETRIC TEST REPORT

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

DATA OF LAMP		PHOTOMETRIC DATA Eff: 107.75 lm/W			
MODEL	UGR19-120/30-CC	Imax (cd)	1438	S/MH (C0/180)	1.23
NOMINAL POWER (W)	30	LOR (%)	100.0	S/MH (C90/270)	1.26
RATED VOLTAGE (V)	240	TOTAL FLUX (lm)	3288.2	<input type="checkbox"/> UP, DN (C0-180)	0.0, 49.1
NOMINAL FLUX (lm)	3288.15	CIE CLASS	DIRECT	<input type="checkbox"/> UP, DN (C180-360)	0.0, 50.9
LAMPS INSIDE	1	<input type="checkbox"/> up (%)	0.0	CIBSE SHR NOM	1.25
TEST VOLTAGE (V)	240	<input type="checkbox"/> down (%)	100.0	CIBSE SHR MAX	1.35



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.570m [K=1.0000]
 Remarks:

ZONAL FLUX DIAGRAM

ZONAL FLUX DIAGRAM:

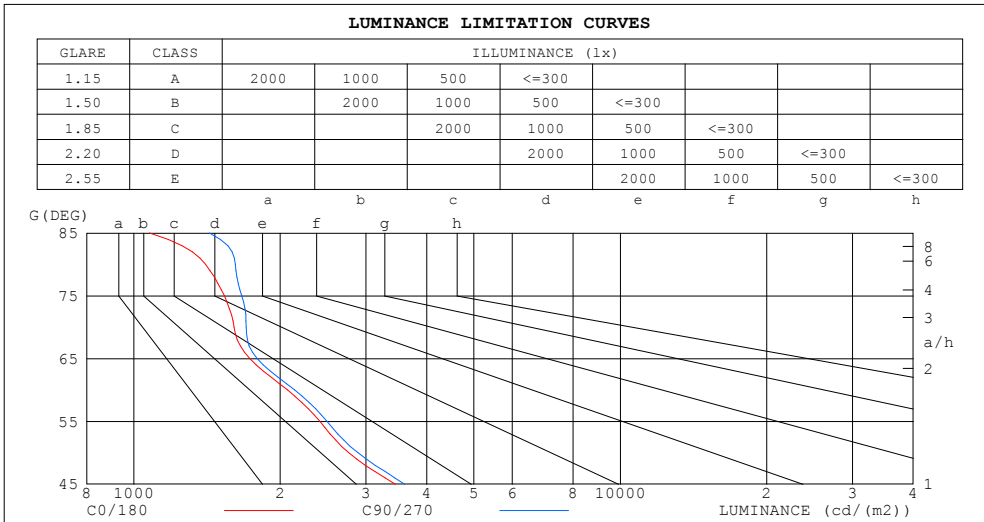
mm	C0	C45	C90	C135	C180	C225	C270	C315	mm	□ zone	□ total	%lum, lamp
10	1403	1405	1409	1413	1417	1416	1414	1410	0- 10	135.9	135.9	4.13,4.13
20	1319	1328	1330	1339	1344	1349	1340	1336	10- 20	389.1	525.1	16,16
30	1184	1197	1204	1218	1226	1233	1220	1212	20- 30	590.1	1115	33.9,33.9
40	937.9	950.3	965.9	979.4	1015	1008	1001	976.5	30- 40	693.9	1809	55,55
50	515.9	624.9	539.1	658.3	601.1	690.7	571.0	650.0	40- 50	614.0	2423	73.7,73.7
60	300.4	340.8	310.9	375.1	356.4	402.3	333.2	363.7	50- 60	422.0	2845	86.5,86.5
70	159.6	172.9	169.1	186.6	194.6	197.4	179.5	181.5	60- 70	250.9	3096	94.2,94.2
80	70.80	84.57	81.54	100.7	99.53	109.3	90.38	93.14	70- 80	144.0	3240	98.5,98.5
90	1.717	1.828	0.7163	4.693	10.09	9.375	1.580	2.224	80- 90	48.22	3288	100,100
100									90-100			
110									100-110			
120									110-120			
130									120-130			
140									130-140			
150									140-150			
160									150-160			
170									160-170			
180									170-180			
DEG	LUMINOUS INTENSITY:cd									UNIT:lm		

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

LUMINANCE LIMITATION CURVES

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



LUMINANCE cd/(m2)		
G (DEG)	C0/180	C90/270
85	1078	1430
80	1404	1618
75	1535	1666
70	1608	1703
65	1732	1792
60	2069	2142
55	2411	2494
50	2765	2889
45	3449	3607

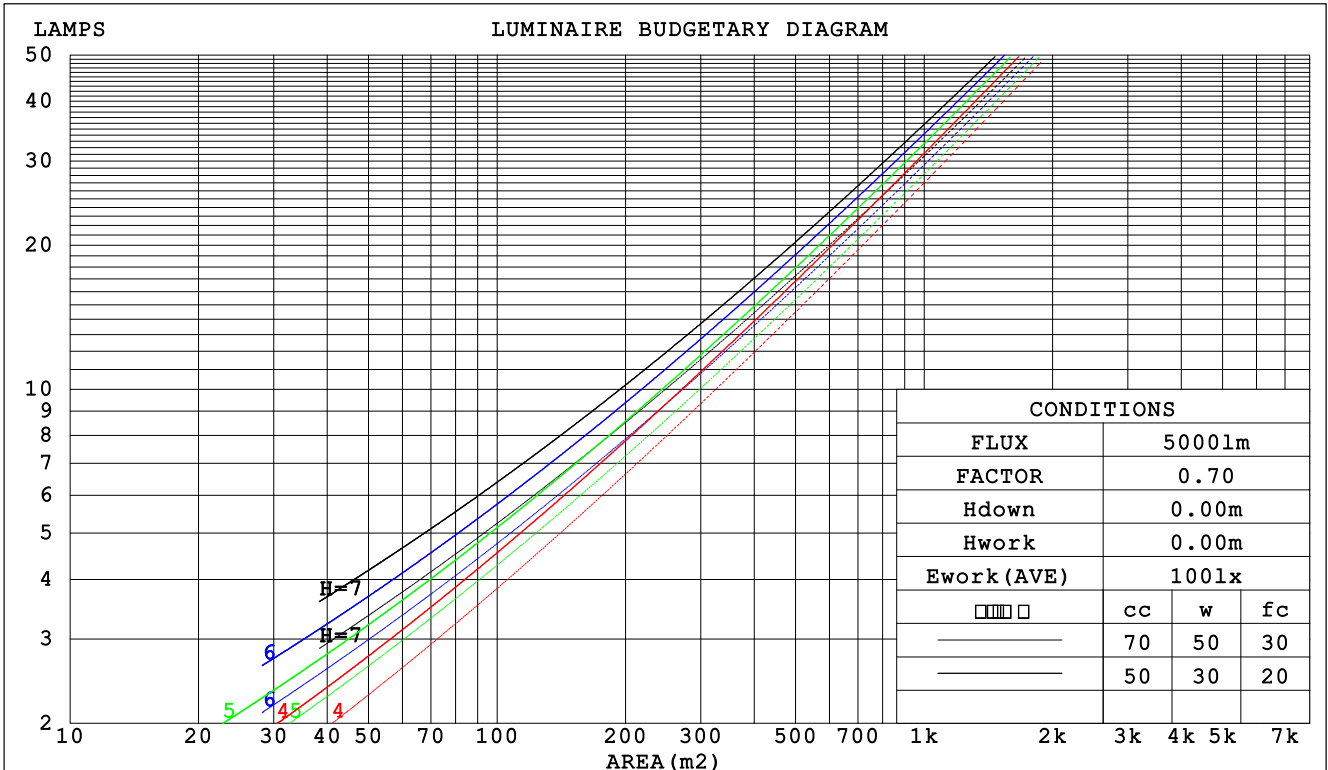
C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

CU AND LUMINAIRE BUDGETARY ESTIMATE DIAGRAM

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

□cc	80%			70%			50%			30%			10%			0
□w	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	50%	30%	10%	0
□fc	20%			20%			20%			20%			20%			0
RCR	RCR:Room Cavity Ratio						Coefficients of Utilization(CU)									
0.0	1.19	1.19	1.19	1.16	1.16	1.16	1.11	1.11	1.11	1.06	1.06	1.06	1.02	1.02	1.02	.00
1.0	1.06	1.02	.98	1.03	1.00	.97	.99	.96	.94	.95	.93	.91	.92	.90	.88	.86
2.0	.94	.88	.82	.92	.86	.82	.88	.84	.80	.85	.81	.78	.82	.79	.76	.74
3.0	.84	.76	.70	.82	.75	.70	.79	.73	.68	.76	.71	.67	.74	.70	.66	.64
4.0	.75	.67	.61	.74	.66	.60	.71	.65	.59	.69	.63	.59	.67	.62	.58	.56
5.0	.68	.59	.53	.66	.59	.53	.64	.58	.52	.63	.56	.52	.61	.55	.51	.49
6.0	.61	.53	.47	.60	.53	.47	.59	.52	.46	.57	.51	.46	.55	.50	.46	.44
7.0	.56	.48	.42	.55	.47	.42	.54	.47	.42	.52	.46	.41	.51	.45	.41	.39
8.0	.51	.43	.38	.51	.43	.38	.49	.42	.37	.48	.42	.37	.47	.41	.37	.35
9.0	.47	.39	.34	.47	.39	.34	.46	.39	.34	.45	.38	.34	.44	.38	.34	.32
10.0	.44	.36	.31	.43	.36	.31	.42	.36	.31	.41	.35	.31	.40	.35	.31	.29



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

WEC AND CCEC

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Wall Exitance Coefficients (WEC)			
0.0						
1.0	.274 .156 .049	.267 .152 .048	.254 .146 .047	.242 .140 .045	.231 .134 .043	
2.0	.260 .142 .044	.254 .140 .043	.242 .135 .042	.232 .130 .041	.222 .126 .040	
3.0	.243 .129 .039	.238 .127 .038	.228 .123 .038	.219 .120 .037	.210 .116 .036	
4.0	.227 .118 .035	.222 .116 .034	.213 .113 .034	.205 .110 .033	.197 .107 .033	
5.0	.212 .108 .031	.208 .107 .031	.200 .104 .031	.192 .102 .030	.186 .099 .030	
6.0	.198 .099 .028	.194 .098 .028	.187 .096 .028	.181 .094 .028	.175 .092 .027	
7.0	.186 .092 .026	.182 .091 .026	.176 .089 .026	.170 .087 .025	.165 .086 .025	
8.0	.175 .085 .024	.172 .084 .024	.166 .083 .024	.161 .081 .023	.156 .080 .023	
9.0	.165 .080 .022	.162 .079 .022	.157 .078 .022	.152 .076 .022	.148 .075 .022	
10.0	.155 .075 .021	.153 .074 .021	.149 .073 .020	.144 .072 .020	.140 .071 .020	

<input type="checkbox"/> cc	80%	70%	50%	30%	10%	0
<input type="checkbox"/> w	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	50% 30% 10%	0
<input type="checkbox"/> fc	20%	20%	20%	20%	20%	0
RCR	RCR:Room Cavity Ratio		Ceiling Cavity Exitance Coefficients (CCEC)			
0.0	.190 .190 .190	.163 .163 .163	.111 .111 .111	.064 .064 .064	.020 .020 .020	
1.0	.178 .156 .137	.152 .134 .118	.104 .092 .082	.060 .053 .047	.019 .017 .015	
2.0	.168 .132 .102	.144 .114 .088	.099 .079 .061	.057 .046 .036	.018 .015 .012	
3.0	.159 .114 .078	.137 .098 .068	.094 .068 .047	.054 .040 .028	.017 .013 .009	
4.0	.151 .100 .062	.130 .087 .054	.089 .061 .038	.052 .035 .022	.017 .012 .007	
5.0	.144 .090 .050	.124 .078 .043	.085 .054 .031	.049 .032 .018	.016 .010 .006	
6.0	.137 .081 .041	.118 .070 .036	.081 .049 .026	.047 .029 .015	.015 .009 .005	
7.0	.130 .074 .035	.112 .064 .030	.078 .045 .022	.045 .027 .013	.015 .009 .004	
8.0	.124 .068 .030	.107 .059 .026	.074 .042 .019	.043 .025 .011	.014 .008 .004	
9.0	.119 .064 .026	.102 .055 .023	.071 .039 .016	.041 .023 .010	.013 .008 .003	
10.0	.113 .059 .023	.098 .051 .020	.068 .036 .014	.040 .021 .009	.013 .007 .003	

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

UGR(Unified Glare Rating) Table

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm										
NAME: UGR19-120/30-CC					TYPE:30W			WEIGHT:		
SPEC.:4000K					DIM.:			SERIAL No.:1		
MFR.:					SUR.:1.152*0.252			Shielding Angle:		
ceiling/cavity	0.7	0.7	0.5	0.5	0.3	0.7	0.7	0.5	0.5	0.3
walls	0.5	0.3	0.5	0.3	0.3	0.5	0.3	0.5	0.3	0.3
working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2
Room dimensions	Viewed crosswise					Viewed endwise				
x = 2H y = 2H	15.5	16.9	15.8	17.1	17.3	15.6	17.0	15.9	17.2	17.4
3H	16.2	17.5	16.5	17.7	18.0	16.4	17.6	16.7	17.9	18.1
4H	16.6	17.8	16.9	18.0	18.3	16.7	18.0	17.1	18.2	18.5
6H	16.8	18.0	17.2	18.2	18.5	17.1	18.2	17.4	18.5	18.8
8H	16.9	18.0	17.3	18.3	18.6	17.2	18.3	17.5	18.6	18.9
12H	17.0	18.0	17.3	18.3	18.6	17.3	18.3	17.6	18.6	18.9
4H 2H	15.8	17.0	16.1	17.3	17.5	15.9	17.1	16.2	17.4	17.6
3H	16.7	17.8	17.1	18.1	18.4	16.9	17.9	17.2	18.2	18.5
4H	17.2	18.2	17.6	18.5	18.9	17.4	18.4	17.8	18.7	19.0
6H	17.7	18.5	18.1	18.9	19.2	17.9	18.7	18.3	19.1	19.5
8H	17.8	18.6	18.2	19.0	19.3	18.1	18.9	18.5	19.2	19.6
12H	17.9	18.6	18.3	19.0	19.4	18.2	18.9	18.6	19.3	19.7
8H 4H	17.5	18.2	17.9	18.6	19.0	17.6	18.4	18.0	18.8	19.1
6H	18.0	18.7	18.5	19.1	19.5	18.2	18.9	18.7	19.3	19.7
8H	18.3	18.8	18.7	19.3	19.7	18.5	19.1	19.0	19.5	20.0
12H	18.4	18.9	18.9	19.3	19.8	18.7	19.2	19.2	19.6	20.1
12H 4H	17.5	18.2	17.9	18.6	19.0	17.6	18.3	18.0	18.7	19.1
6H	18.1	18.7	18.5	19.1	19.5	18.3	18.9	18.7	19.3	19.7
8H	18.4	18.9	18.8	19.3	19.8	18.6	19.1	19.1	19.5	20.0
Variations with the observer position at spacings:										
S = 1.0H	+ 0.4 / - 0.5					+ 0.4 / - 0.5				
1.5H	+ 0.2 / - 0.5					+ 0.2 / - 0.4				
2.0H	+ 0.7 / - 0.8					+ 0.7 / - 0.7				

CIE Pub.117, 3288 lm Total Lamp Luminous Flux Corrected (8log(F/F0) = 4.1)

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

UTILIZATION FACTORS TABLE

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

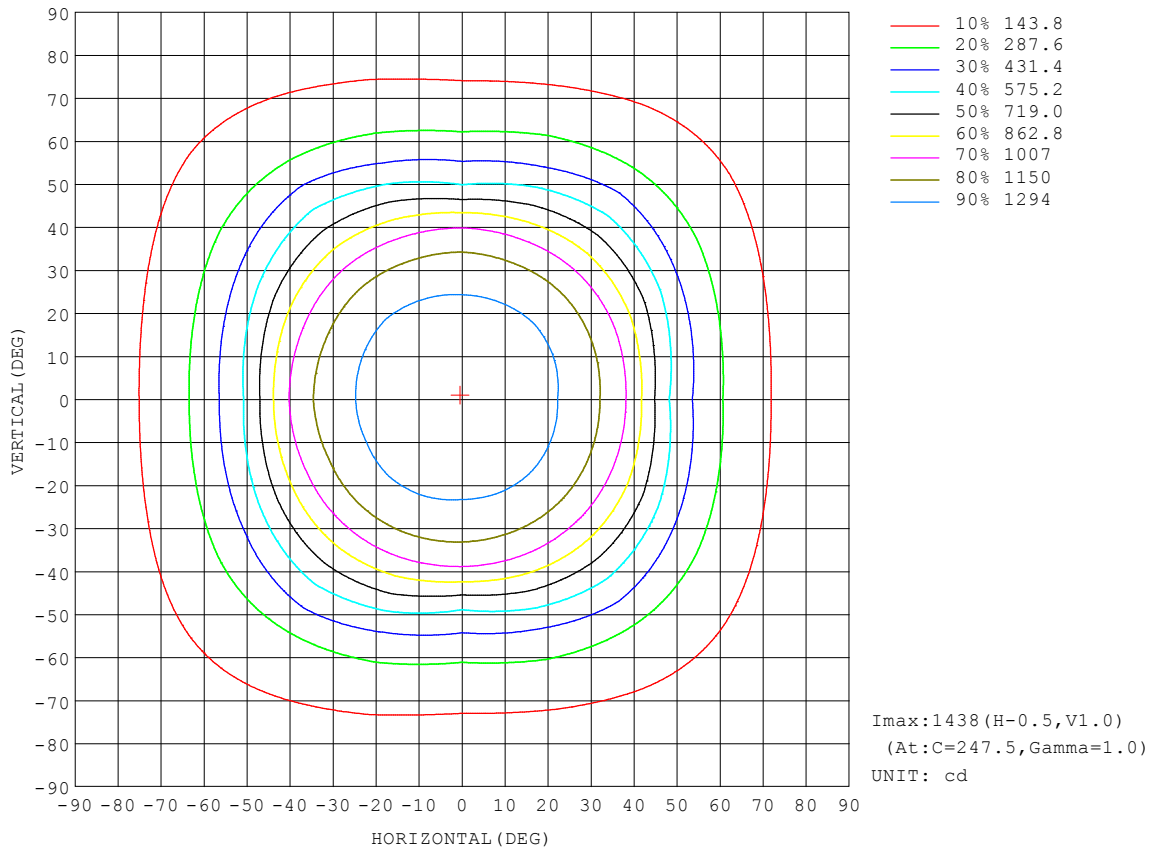
REFLECTANCE										
Ceiling	0.8	0.8	0.8	0.7	0.7	0.7	0.5	0.5	0.5	0
Walls	0.7	0.5	0.3	0.7	0.5	0.3	0.7	0.5	0.3	0
Working plane	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0.2	0
ROOM INDEX	UTILIZATION FACTORS (PERCENT) $k(RI) \times RCR = 5$									
k = 0.60	63	53	47	63	53	46	62	52	46	40
0.80	73	63	56	73	63	56	71	62	56	50
1.00	82	72	65	80	71	65	78	72	64	58
1.25	88	79	73	87	78	72	84	77	72	65
1.50	93	84	78	91	83	78	88	82	76	70
2.00	99	91	86	97	90	85	94	88	83	76
2.50	102	95	90	100	94	89	96	91	87	79
3.00	105	99	94	103	97	93	99	94	91	83
4.00	108	103	99	106	101	98	102	98	95	87
5.00	110	106	102	108	104	101	103	100	98	89
ROOM INDEX	UF(total)									Direct
According to DIN EN 13032-2 2004			Suspended				SHRNOM = 1.25			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

ISOCANDELA DIAGRAM

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

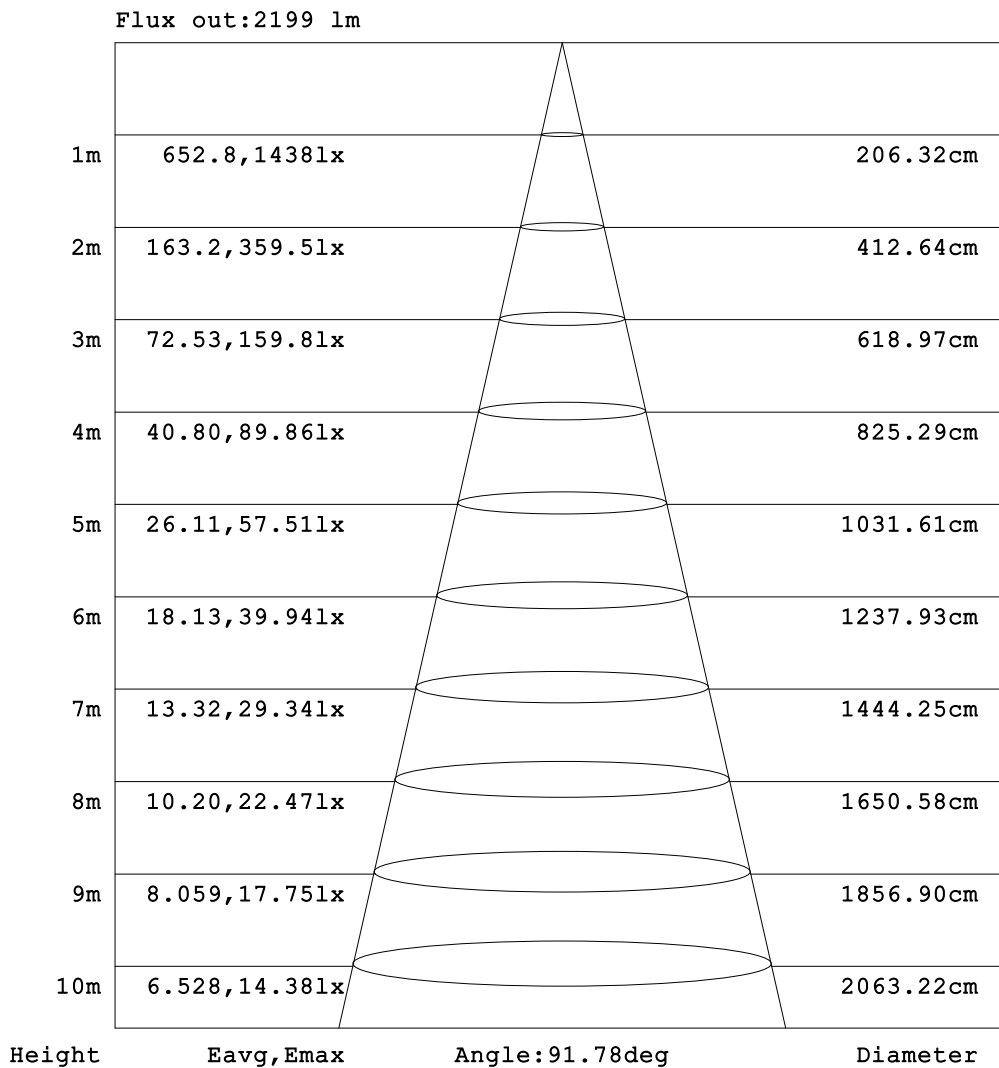


C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

AAI Figure

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



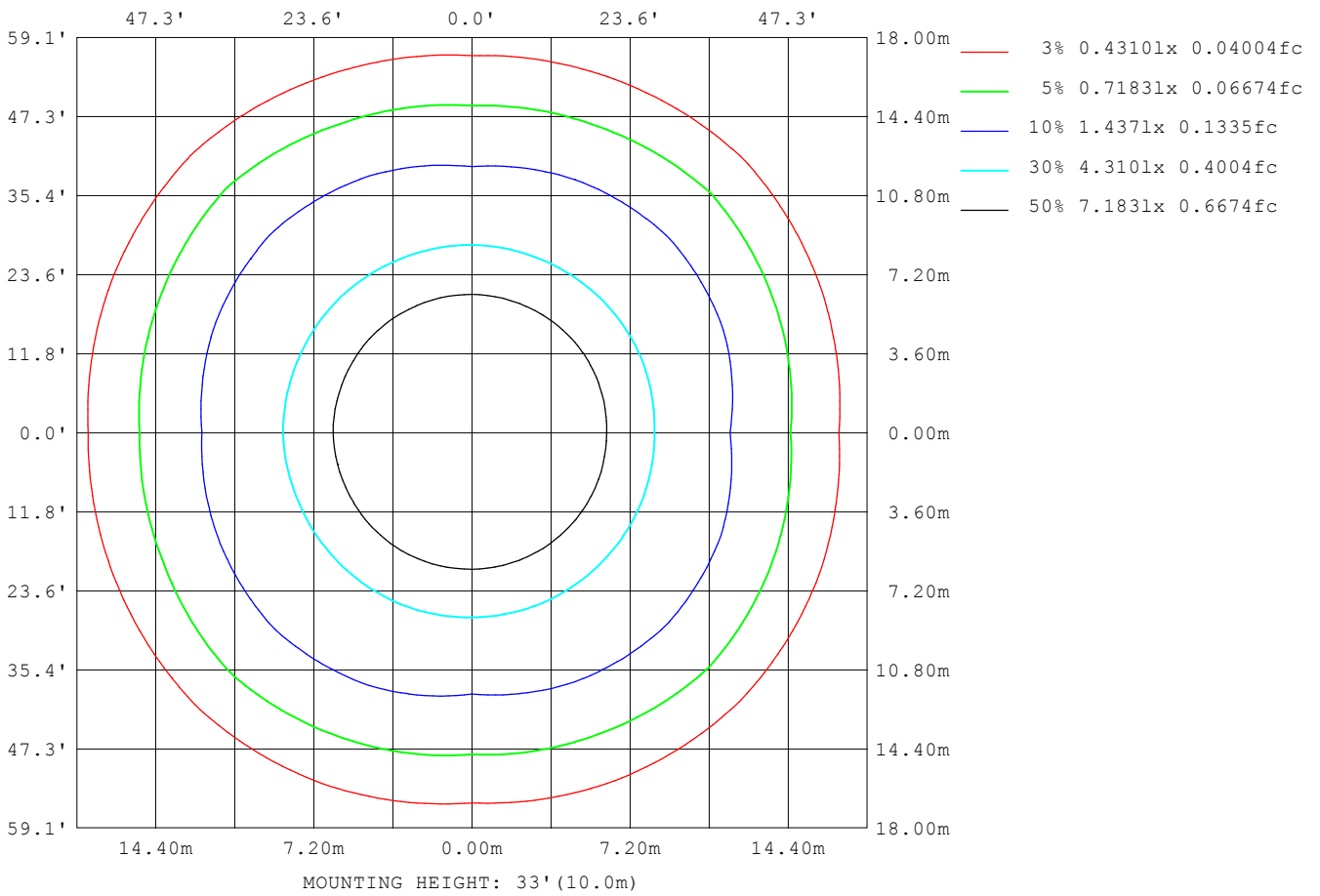
Note:The Curves indicate the illuminated area and the average illumination when the luminaire is at different distance.

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

ISOLUX DIAGRAM

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

LED Avg.L Report

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

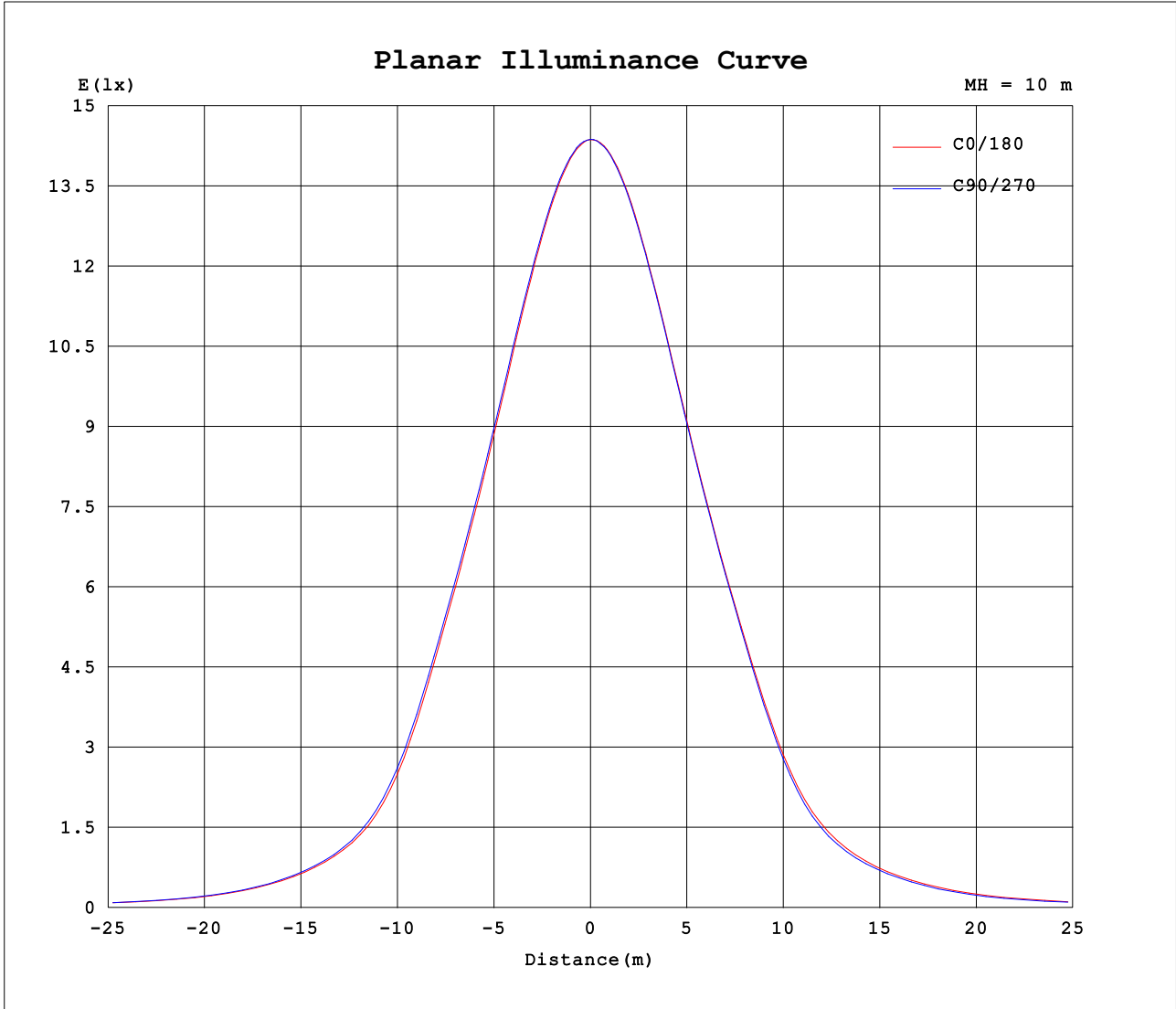
AvgL	cd/m2
L_0~180 (65) av	1927
L_0~180 (75) av	1731
L_0~180 (85) av	1603
L_90~270 (65) av	1859
L_90~270 (75) av	1732
L_90~270 (85) av	1613
L_45 (65) av	2055
L_45 (75) av	1862
L_45 (85) av	1844

Standard: GB/T 29293-2012

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks:

Planar Illuminance Curve



C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature: 25.3DEG
 Operators: DAMIN
 Test Date: 2022-07-15

Range: 0 - 90DEG
 Interval: 1.0DEG
 Test System: EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity: 65.0%
 Test Distance: 8.570m [K=1.0000]
 Remarks:

LUMINOUS DISTRIBUTION INTENSITY DATA

Test:U:240.24V I:0.1304A P:30.515W PF:0.9751 Freq:50.00Hz Lamp Flux:3288.15x1 lm		
NAME: UGR19-120/30-CC	TYPE:30W	WEIGHT:
SPEC.:4000K	DIM.:	SERIAL No.:1
MFR.:	SUR.:1.152*0.252	Shielding Angle:

Table--1

UNIT: cd

C (DEG) \ □ (DEG)	0	22.5	45	67.5	90	112.5	135	157.5	180	202.5	225	247.5	270	292.5	315	337.5			
0	1437	1436	1437	1437	1438	1438	1437	1436	1437	1436	1437	1437	1438	1438	1437	1436			
5	1427	1427	1428	1429	1429	1431	1431	1432	1435	1434	1434	1433	1433	1431	1429	1429			
10	1403	1404	1405	1408	1409	1411	1413	1413	1417	1417	1416	1415	1414	1412	1410	1408			
15	1367	1370	1371	1374	1376	1379	1380	1381	1387	1386	1387	1384	1383	1380	1377	1374			
20	1319	1324	1328	1330	1330	1337	1339	1339	1344	1346	1349	1344	1340	1338	1336	1329			
25	1258	1265	1272	1273	1273	1283	1289	1286	1291	1295	1300	1292	1286	1283	1284	1273			
30	1184	1189	1197	1200	1204	1212	1218	1215	1226	1227	1233	1224	1220	1213	1212	1201			
35	1091	1090	1092	1103	1113	1116	1118	1122	1143	1136	1138	1133	1135	1121	1114	1105			
40	938	945	950	960	966	977	979	987	1015	1007	1008	1000	1001	984	977	966			
45	708	774	788	779	740	806	820	814	810	843	852	833	787	805	814	791			
50	516	597	625	600	539	628	658	638	601	668	691	654	571	626	650	615			
55	402	442	477	442	415	464	512	479	464	505	542	485	437	464	499	454			
60	300	327	341	332	311	348	375	364	356	382	402	363	333	348	364	336			
65	212	232	233	240	220	250	255	267	260	278	274	263	236	254	247	242			
70	160	168	173	174	169	180	187	193	195	199	197	190	179	181	181	173			
75	115	125	129	129	125	140	143	145	145	151	150	147	135	137	137	131			
80	70.8	78.9	84.6	82.4	81.5	95.6	101	99.2	99.5	107	109	104	90.4	90.5	93.1	84.9			
85	27.3	30.6	34.6	33.4	36.2	42.5	50.5	49.2	53.8	56.4	58.5	50.9	45.4	41.9	43.1	36.7			
90	1.72	1.89	1.83	1.14	0.72	1.83	4.69	6.08	10.1	10.3	9.38	5.22	1.58	1.72	2.22	2.43			

C Range: 0 - 360DEG
 C Interval: 22.5DEG
 Test Speed: HIGH
 Temperature:25.3DEG
 Operators:DAMIN
 Test Date:2022-07-15

□ Range: 0 - 90DEG
 □ Interval: 1.0DEG
 Test System:EVERFINE GO-2000H_V1 SYSTEM V2.0.404.7
 Humidity:65.0%
 Test Distance:8.570m [K=1.0000]
 Remarks: